

REMARKS

This amendment is being filed in response to the Office Action having a mailing date of July 28, 2005. Claims 1-3 and 5 are amended as shown. New claim 6 has been added. No new matter has been added. With this amendment, claims 1-6 are pending in the application.

In the Office Action, claims 1-5 were rejected under 35 U.S.C. § 112, first paragraph. To address these rejections, the term “formed” has been replaced with --recorded-- in claims 1-3.

Claims 1-5 were objected to because of various informalities. The format of independent claims 1 and 3 has been changed in order to better conform with accepted U.S. Patent Office practice. The term “projections” in claim 2 has been replaced with --projection structures--. Amendments have been made to claims 1 and 3 to clarify that the holographic recording medium is the structure *having* the recited *regions*. Claims 1 and 3 have also been amended to remove the phrase “by projecting the signal beam and the reference beam onto the holographic recording medium.” With these amendments, it is believed that the objections to claims 1-5 have been overcome.

In the Office Action, claims 1-5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Horimai (U.S. Patent Publication No. 2003/0063342A1). Claims 1-4 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Curtis (U.S. Patent No. 6,909,529) in view of Horimai. Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Curtis in view of Horimai and in further view of Matsui (U.S. Patent No. 5,784,353). Claims 1-5 were provisionally rejected under obviousness type double patenting as being unpatentable over claims 1, 3-4, and 6-7 of co-pending U.S. Application Serial No. 10/800,607. For the reasons set forth below, the applicant respectfully disagrees with these rejections, and requests that the pending claims be allowed.

A disclosed embodiment will now be discussed in comparison to the applied references. Of course, the discussion of the disclosed embodiment, and the discussion of the differences between the disclosed embodiment and subject matter described in the applied references, do not define the scope or interpretation of any of the claims. Instead, such discussed

differences are intended to merely help the Examiner appreciate important claim distinctions discussed thereafter.

In one embodiment disclosed in the present application, the signal beam, the reference beam, and the servo beam are simultaneously projected onto the holographic recording medium. The signal beam and the reference beam having a wavelength λ_0 are emitted from a first light source 201, and a servo beam having a second wavelength λ_1 is emitted from a second light source 231. The first wavelength λ_0 and the second wavelength λ_1 are different from one another. *See, e.g.*, Figure 2 and the accompanying description in the present application.

Furthermore in one embodiment, the servo layer 223 is disposed on an opposite side of the recording layer 221, as viewed in a direction of signal beam incidence on the holographic recording medium 220. *See, e.g.*, Figure 3 and the accompanying description in the present application.

Horimai does not disclose, teach, or suggest these features. For instance, the output of the emission of light from the light source device 25 of Horimai is set at a low output for reproduction and the controller 90 predicts the timing at which light that has exited the objective lens 12 passes through the address servo areas 6 and causes the light source device 25 to emit the servo light. *See, e.g.*, page 10, paragraph [0135] of Horimai (emphasis ours). In other words, the controller 90 of Horimai causes emission of the servo light in response to and after the signal light has passed through the servo areas--there is no simultaneity in the signal light and servo light in Horimai.

Furthermore in Horimai, the signal light and the servo light are emitted from the same light source device 25. The signal light and the servo light in Horimai have the same wavelength. These features are in contrast to the embodiment(s) disclosed by the present applicant, in which the first wavelength λ_0 and the second wavelength λ_1 are different from one another, and are emitted from first and second light sources.

In Curtis, the servo marks 210 in Figures 11-12 are disposed on the side of a light incidence plane. In other words, the servo marks 210 are disposed closer to the light incidence plane than the recording layer in Curtis, which is in contrast to the embodiment(s) disclosed by the present applicant in which the servo layer 223 is disposed on an opposite side of the

recording layer 221, as viewed in a direction of signal beam incidence on the holographic recording medium 220.

Accordingly, independent claim 1 has been amended to recite that the first signal beam and the reference beam are emitted from a first light source and have a wavelength λ_0 , and that the servo beam is emitted from a second light source and has a wavelength λ_1 different from that of the signal beam. Claim 1 is further amended to recite --the servo beam being emitted from the second light source at a same time as the signal beam and the references beam are emitted from the first light source--. These features are not disclosed, taught, or suggested by Horimai, since Horimai only uses a same light source 25 and does not provide different wavelengths for his signal and servo lights. Moreover, the signal light and servo light are not provided at the same time by Horimai, as now recited in amended claim 1. Accordingly, claim 1 is allowable over Horimai.

Curtis does not cure the deficiencies of Horimai. For example, Curtis does not provide the recited servo layer disposed on an opposite side of the recording layer as viewed in a direction of signal beam incidence on the holographic recording medium. As explained above, the servo marks 210 of Curtis are disposed on the side of a light incidence plane. Accordingly, claim 1 is further allowable over Curtis and Horimai, whether singly or in combination.

Independent claim 3 is amended to recite --a first light source to emit the signal beam and the reference beam having a wavelength λ_0 ; and a second light source to emit the servo beam having a wavelength λ_1 , the first light source and the second light source being driven simultaneously, thereby simultaneously emitting the signal beam, the reference beam, and the servo beam--. The recited first and second light sources, first and second wavelengths, and simultaneous emission are not disclosed, taught, or suggested by Horimai.

Furthermore, the recited servo layer disposed on an opposite side of the recording layer as viewed in a direction of signal beam incidence is not disclosed, taught, or suggested by Curtis. Accordingly, claim 3 is allowable over Horimai and Curtis, whether singly or in combination.

Matsui does not cure the deficiencies of Horimai and/or Curtis. That is, while Matsui does disclose an apparatus having a diffraction grating, such an apparatus is directed

towards initializing an optical disk and is therefore irrelevant to combining with the devices of Horimai and/or Curtis. Accordingly, the claims are also allowable over Matsui, whether singly or in combination with the other references.

Claim 1 has been further amended to clarify that claim 1 and its dependent claims do not fall within the scope of 35 U.S.C. § 112, sixth paragraph, by deleting the term “steps.” Other amendments have been made to the claims as shown to provide proper antecedent basis or to otherwise place such claims in better form.

With the various amendments to the claims, it is believed that the provisional obviousness type double patenting rejection has been made moot. Accordingly, the applicant respectfully requests the Examiner to withdraw the provisional double patenting rejection. However, should the Examiner feel that the double patenting rejection is still applicable, then the Examiner is kindly requested to inform the applicant accordingly in the next communication, so that the applicant can further consider whether a terminal disclaimer should be filed or whether some other appropriate responsive action should be taken.

New independent claim 6 recites features that are distinctive over the cited references. Such features include the first and second light sources, the first and second wavelengths that are different from one another, and servo beam emission at the same time as the signal and reference beams. New claim 6 also includes recitations that satisfy the 35 U.S.C. § 112 issues and objections raised by the Examiner in the Office Action, and is allowable.

Overall, none of the references singly or in any motivated combination disclose, teach, or suggest what is recited in the independent claims. Thus, given the above amendments and accompanying remarks, the independent claims are now in condition for allowance. The dependent claims that depend directly or indirectly on these independent claims are likewise allowable based on at least the same reasons and based on the recitations contained in each dependent claim.

If the undersigned attorney has overlooked a teaching in any of the cited references that is relevant to the allowability of the claims, the Examiner is requested to specifically point out where such teaching may be found. Further, if there are any informalities

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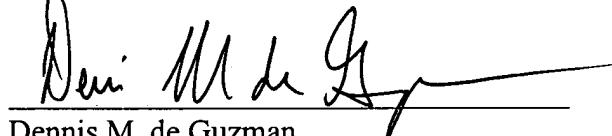
or questions that can be addressed via telephone, the Examiner is encouraged to contact the undersigned attorney at (206) 622-4900.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

All of the claims remaining in the application are now clearly allowable. Favorable consideration and a Notice of Allowance are earnestly solicited.

Respectfully submitted,

SEED Intellectual Property Law Group PLLC



Dennis M. de Guzman
Registration No. 41,702

DMD:wt

Enclosure:

Postcard

701 Fifth Avenue, Suite 6300
Seattle, Washington 98104-7092
Phone: (206) 622-4900
Fax: (206) 682-6031

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